



# Information Sheet

## 2.1 Industrial guidelines for burning sugarcane

### Introduction

The sugar industry in South Africa burns about 90% of its crop at harvest while the rest is harvested green.

There are several advantages to green cane harvesting. These relate mainly to soil and moisture conservation and can result in increased yields. These are spelt out in detail in Information Sheet 6.13: *The pros and cons of mulching or burning at harvest*.

Besides these agronomic advantages of trashing at harvest, burning of sugarcane should be reduced wherever possible, because:

- The smoke from fires may be hazardous to road users and annoying to the public;
- Burning under high tension power lines might cause a short which may disrupt the power supply;
- Ash from fires may fall onto sensitive areas (e.g. residential, schools and beaches); and
- Greenhouse gases are emitted into the atmosphere and contribute to global warming.

If a decision has been taken to burn at harvest, growers must be fully aware of their responsibilities before setting alight any combustible material on their farms. Currently, two Acts of Parliament regulate the burning of sugarcane or any other combustible material on a farm. The National Veld and Forest Fire Act, No. 101 of 1998 and the Conservation of Agricultural Resources Act, No. 43 of 1983 applies to any owner, lessee, lawful occupier or other person in control of land where a veld, forest or mountain fire can start on a land, burn on a land or spread on that land.

### Code of Practice on Burning

Codes of Practice provide acceptable ways of complying with legislation, minimising negative impacts on the social and biophysical environment while aiding in crop production.

There are several issues covered in the Code of Practice for burning sugarcane. Some of these relate to legislative requirements, while others are not required by law, but are best management practices that should be followed.

### Legal Requirements

- Communicate with local authorities (FPA, ESKOM, etc.) and neighbours regarding the intended burning practices and the intention to co-operate fully.

- Adhere to the National Veld and Forest Fire Act, No. 101 of 1998 regarding restrictions on burning at weekends.
- Advise Provincial Traffic Authorities when burning along public roads.
- Follow safe practices when burning along public roads.

### Better Management practices

- Become a member of the Local Fire Protection Association.
- Identify sensitive areas in each region (e.g. public roads, residential areas, beaches and power lines).
- Leave a barrier of unburnt cane adjacent to the identified sensitive areas; the barrier zone should be burnt only when there is no alternative, for example, at the time of re-establishment and then only when the wind is in the right direction.
- Advise authorities whenever an unintended burn occurs near a sensitive area.



- Map farm areas for burning or trashing according to agronomic/economic and environmental factors. Panel sizes could also be matched to the daily rateable delivery tonnages of the farm, to avoid burning too far ahead.
- Try, as far as possible, to do some strategic burns early in the season before conditions become too dry. These areas may be adjacent to forestry areas or areas where arson fires are likely to originate.
- Plan the harvest programme so that there are always fields that may be trashed if burning is not advisable.
- Record the fields burnt, date and time of burning and prevailing wind direction.
- Be aware and take note of daily Fire Danger Index (FDI) notifications during fire season when preparing to burn firebreaks or cane for harvesting.
- Be advised by the weather forecasters and local knowledge as to the advisability and time of burning.
- Ensure that minimum requirements in terms of fire fighting equipment and staffing, are met (as prescribed by the local Fire Protection Association). Access to these resources should be within 30 minutes.
- Cane in stacks in the fields or on the zones should not be burnt, as it is ineffective and can be a hazard.
- Cane fires under power lines cause flashovers resulting in the possibility of arcing; cane under power lines should therefore be flattened before burning. Good communication with electricity suppliers and notification of intended fires is good practice.
- After burning, the tops should be left scattered evenly in the field to help with soil and moisture conservation.
- A cool burn in the morning (provided it conforms to the code of burning practice) provides more tops than a late afternoon, hot burn.

## Safety management

- Burning along public roads can be hazardous. Advise provincial traffic authorities of every burn. Road signs indicating 'burning in progress, slow down, switch on headlights, smoke hazard, etc.' should be used together with flashing lights and waving red flags at both ends of the burn.
- Advise neighbours of your intention to burn. This is particularly important during 'fire season' and if cane is being burned on or near farm boundaries.
- Boundary breaks with neighbours: Ensure that the minimum requirements for firebreaks, as laid out by the insurance company and/or local FPA, are met.
- Good collaboration with neighbours is always advisable, concerning the preparation and burning of firebreaks.
- Have a SASRI Land Use Plan drawn up and implement it on the farm. This will ensure a logical field layout which also assists with the burning of sugarcane and the control of runaway fires. Good field access and no 'dead ends' are critical to safer burning and fire fighting. This is particularly helpful to neighbours who may have to assist with fire fighting, often at night.
- Make sure you have the correct/sufficient equipment for the burning of sugarcane and fire fighting on the farm. If possible, a backup vehicle is helpful especially when burning 24 month old cane in the Midlands where fuel loads are high (trash).

*For further information, see:*

- ♦ *SASRI Information Sheet 6.13: The pros and cons of mulching or burning at harvest.*
- ♦ *Code of Burning Practice of your Local Environment Committee).*

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